

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : A61M 5/00, 5/32	A1	(11) International Publication Number: WO 00/48651 (43) International Publication Date: 24 August 2000 (24.08.00)
---	-----------	---

(21) International Application Number: PCT/US00/04216

(22) International Filing Date: 18 February 2000 (18.02.00)

(30) Priority Data:
60/120,622 18 February 1999 (18.02.99) US

(71) Applicant (for all designated States except US): SYRINGE DEVELOPMENT PARTNERS L.L.C. [US/US]; 1675 Lakes Parkway, Suite 150, Lawrenceville, GA 30043 (US).

(71)(72) Applicant and Inventor: PRESSLY, William, B., S., Sr. [US/US]; 112 Caedmon Court, Greer, SC 29650 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): BROCKWAY, G., Samuel [US/US]; P.O. Box 1181, Lawrenceville, GA 30246 (US). VAUGHN, Charles, A., Sr. [US/US]; 2757 Meadow Forest Drive, Duluth, GA 30136 (US). ELLIS, Thomas, R. [US/US]; 238 Mill Ridge Court, Lawrenceville, GA 30245 (US).

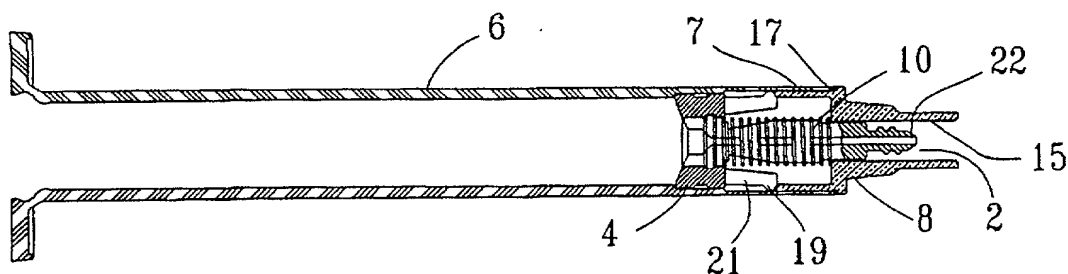
(74) Agents: PRATT, John, S. et al.; Kilpatrick Stockton LLP, Suite 2800, 1100 Peachtree Street, Atlanta, GA 30309-4530 (US).

(81) Designated States: CA, JP, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published

With international search report.

(54) Title: INTERCHANGEABLE NEEDLE SAFETY SYRINGE



(57) Abstract

The present invention is a safety syringe for use with a plurality of interchangeable needles. The plurality of needles may be inserted by the user into the safety syringe for use. In operations, the user selects the desired needle, e.g., a needle having a particular gauge or size or of a particular type. The user inserts the needle (14) into a safety syringe (10) comprising a barrel (6), a needle assembly area (18) located within or attached to the barrel and a plunger (66). The needle couples to the syringe by a number of means. For instance, a locking mechanism (20, 22) may be used by which a needle hub located within the needle assembly has an area adapted to mate with a corresponding area on the needle. Or, the needle may be formed as part of a separate needle assembly, whereby the user will place the entire needle assembly onto the end of the syringe barrel. During use, the user operates the syringe like other safety syringe, using one hand to depress the plunger, which ultimately causes a spring to propel the needle into the barrel of the syringe.